

THE NEW NOMACORC GREEN LINE.

PLANT-BASED CLOSURES FOR AGE-WORTHY WINES.



NOMACORC®

PERFORMANCE DESIGN SUSTAINABILITY



INTRODUCING NOMACORC GREEN LINE

Nomacorc Green Line is a new "category" of closures called **PlantCorc™**, derived from sustainable, renewable sugarcane-based raw materials. Driven by a steadfast commitment to innovation, sustainability and continuous improvement, **Nomacorc Green Line** offers dramatic improvements in wine closure **Performance, Design, and Sustainability**.

Green Line closures are based on **our patented & proven co-extrusion manufacturing technology, which ensures bottle-to-bottle consistency**, and eliminates faults due to oxidation, reduction, off-flavors associated with TCA and other contaminants. **The natural look** and soft-feel skin ensures trouble-free bottling performance and provides customers a smooth extraction and reinsertion closure experience.

With a culture committed to sustainability and an ultimate product vision of **carbon neutrality**, **Nomacorc Green Line** products utilize proprietary PlantCorc technology to reduce the environmental impact of carbon-based emissions. All **Nomacorc Green Line** closures are certified to contain plant-based raw materials substantially reducing carbon footprint. Our PlantCorcs™ are produced using sustainable manufacturing processes powered by renewable energy and are fully recyclable.

Reserva

Best-in-class closure for luxury wines with extensive aging times up to 25 years

p.9

Select Green

The world's 1st zero carbon footprint closure for premium wines with aging requirements up to 15 years

p.10

Classic Green

The premium generation successor to our industry leading "Classic+" product for popular and premium wines

p.11

Smart Green

The successor to our "Smart+" product for entry level, cost-sensitive wines

p.12

Zest Premium

High performance, zero carbon footprint closure for premium sparkling wines

p.13



Reduced carbon footprint



Made with sugarcane-based polymers



Minimized impact on the environment



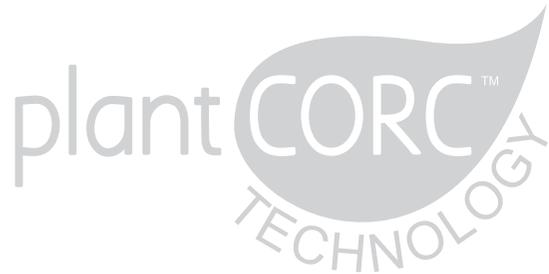
100% recyclable

PLANTCORC™ TECHNOLOGY AND RENEWABLE RAW MATERIALS

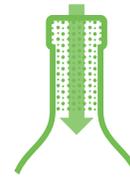
PlantCorc™ technology is a new, **nature-inspired category** of high-performance wine closures. Building off the success of Nomacorc's oxygen management research initiative, this latest innovation couples the **sustainability** of renewable plant-based raw materials with the **consistency** and predictability of co-extrusion technology.

In 2013, with the launch of Select Bio, Nomacorc developed the **world's first zero carbon footprint** closure and began the journey to apply this technology to all of our closures today known as **Nomacorc's Green Line**.

PlantCorc™ technology utilizes plant-based raw materials derived from sources such as sugarcane. The plant-based ingredients used in the production of **Nomacorc's Green Line** are harvested using techniques ensuring there are no negative effects on the food supply or the environment.



Low Carbon Footprint



Controlled Oxygen Ingress

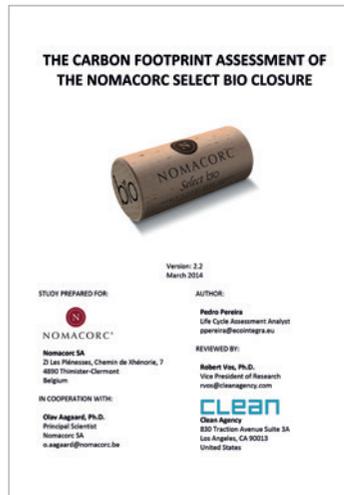


Consistent Performance



Premium Design

CERTIFICATIONS



AWARDS



PERFORMANCE

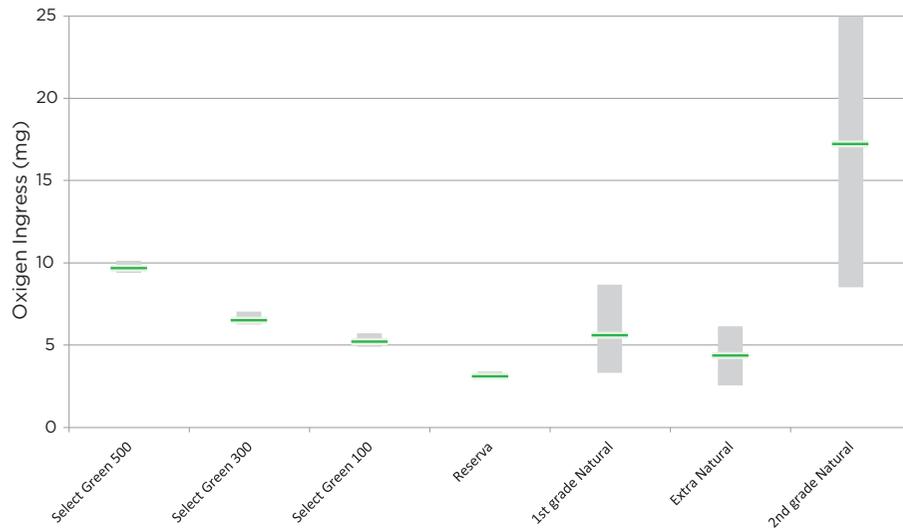
Based on years of **oxygen management** research studying various winemaking styles and in collaboration with leading wine institutions and winemakers, consistent control of oxygen ingress post-bottling is fundamental to the **Nomacorc Green Line**.

While maintaining the traditional bottle-opening experience, the precision of co-extrusion technology benefits all wines, including those of the highest quality requiring **wine preservation up to 25 years**.

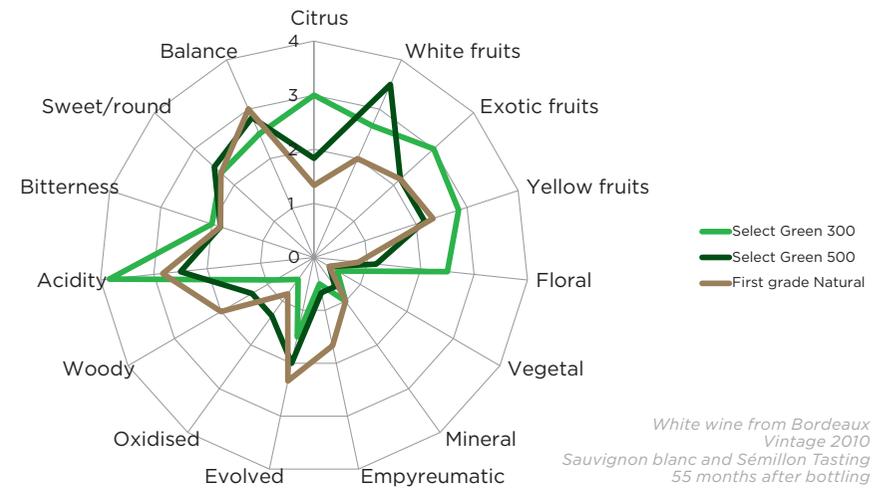
Nomacorc Green Line closures provide the same trusted performance winemakers have come to expect from Nomacorc including:

- TCA- and migration-free
- Smooth and easy extraction and reinsertion, no crumbling or breakage
- Reliable bottling performance
- Clean, safe, and compliant product compositions

OXYGEN INGRESS AFTER 5 YEARS



ENOLOGICAL PERFORMANCE OF SELECT GREEN



DESIGN

The **Green Line** introduces new features which enhance the **look and feel** of the Nomacorc closure.

ELEGANT AND
NATURAL APPEARANCE,
TAKING CUES FROM NATURE

SOFT-SKIN FEEL

PREMIUM END
TREATMENT



SUSTAINABILITY

From the start, sustainability was a guiding principle at Nomacorc –important to our founders, associates and customers.

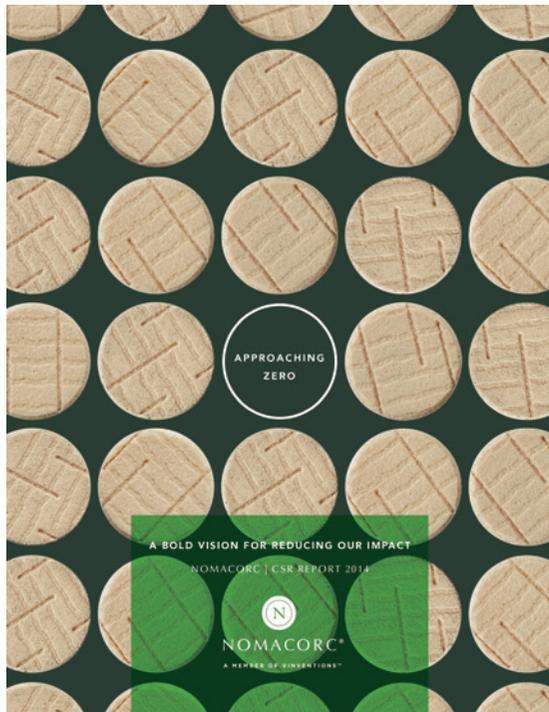
Our sustainability journey continues today, as we strive to improve all aspects of our business:

- Optimized product development processes with reduced environmental impact
- State-of-the-art Lean manufacturing using renewable energy

Nomacorc Green Line's patented formulation includes sugarcane plant-based polymers, a 100% renewable raw material source.

This helps absorb CO₂ from the atmosphere.

The sugarcane plants are also cultivated in a socially responsible way, without impact to local food supply.



Product name	Closure Carbon Footprint	Vinçotte Bio based Rating
<i>Reserva</i>	-1	★★★
<i>Select Green</i>	-1	★★★
<i>Classic Green</i>	4	★★
<i>Smart Green</i>	7	★
<i>Zest Premium</i>	0	★★★
<i>Natural Cork</i>	8	-
<i>Micro Agglos</i>	21	-
<i>Screwcaps</i>	52	-



RESERVA

GREEN LINE SOLUTION FOR LUXURY WINES

Reserva provides the optimum in performance, design and sustainability for age-worthy premium wines.

- Low oxygen ingress ideal for fragile and crisp wines as well as high-quality red wines intended to age for up to 25 years.
- TCA-free—no cork taint
- Flor grade natural cork's distinctive growth-line features and natural imperfections
- Enhanced, soft-feel surface with an easy grip and a more appealing tactile touch
- Made from the highest grade, renewable plant-based polymers
- High resolution print capability
- 100% recyclable



	<i>Reserva</i>
Wine Preservation	Up to 25 years
Oxygen Ingress per Bottle	0.29 mg of O ₂ After 3 Months 0.44 mg of O ₂ After 6 Months 0.73 mg of O ₂ After 12 Months 0.60 mg of O ₂ per Year, After 1 st Yr
Bio-based Rating	★ ★ ★
Carbon Footprint	-1 gr CO _{2eq} per closure
Premium End Treatment	Yes
Customized Printing	Yes
Diameter	23.5 mm
Lengths	44 mm 47 mm 52 mm



SELECT GREEN

GREEN LINE SOLUTION FOR PREMIUM STILL WINES

Select Green uses Nomacorc’s proprietary PlantCorc™ technology to provide an environmentally-friendly closure, superior performance and enhanced oxygen control. Premium features include:

- Low oxygen ingress ideal for premium wines intended to age up to 15 years
- Three distinct oxygen ingress rates, providing the winemaker control over oxygen levels allowed into the bottle so the wine develops as intended
- Natural cork’s distinct wood-grain markings
- Soft-touch skin for robust bottling line performance and the tactile feel of bark-based closures
- World’s first closure with zero carbon footprint
- Made from renewable, plant-based polymers
- 100% recyclable



	Select Green 100	Select Green 300	Select Green 500
Wine Preservation	Up to 15 years	Up to 10 years	Up to 8 years
Oxygen Ingress per Bottle	0.40 mg of O ₂ After 3 Months 0.66 mg of O ₂ After 6 Months 1.22 mg of O ₂ After 12 Months 1.11 mg of O ₂ per Year, After 1 st Yr	1.51 mg of O ₂ After 3 Months 1.99 mg of O ₂ After 6 Months 2.62 mg of O ₂ After 12 Months 1.11 mg of O ₂ per Year, After 1 st Yr	1.71 mg of O ₂ After 3 Months 2.25 mg of O ₂ After 6 Months 3.13 mg of O ₂ After 12 Months 1.72 mg of O ₂ per Year, After 1 st Yr
Bio-based Rating	★★★	★★★	★★★
Carbon Footprint	-1 gr CO _{2eq} per closure	-1 gr CO _{2eq} per closure	-1 gr CO _{2eq} per closure
Premium End Treatment	Embossed	Embossed	Embossed
Customized Printing	Yes	Yes	Yes
Diameters	23 mm 24 mm	23 mm 24 mm	22.5 mm 23.5 mm
Lengths	38 mm 44 mm 47 mm	38 mm 44 mm 47 mm	38 mm 44 mm 47 mm



CLASSIC GREEN

GREEN LINE SOLUTION FOR POPULAR AND PREMIUM STILL WINES

Classic Green is the next generation of the world's leading wine closure Classic+. Using PlantCorc technology based on renewable plant-based polymers derived from sugarcane, Classic Green is more sustainable and enjoys updated features to enhance its overall look and feel. Classic Green also provides the same reliability and consistency trusted by over 5000 winery customers worldwide.

- Lower oxygen ingress rates compared to Classic+
- TCA-free—no cork taint
- Premium embossed end treatment
- Chamfered
- Soft-feel is easier to grip and has a more appealing, softer tactile touch
- Made from renewable, plant-based polymers
- 100% recyclable



	<i>Classic Green</i>
Wine Preservation	Up to 5 years
Oxygen Ingress per Bottle	1.70 mg of O ₂ After 3 Months 2.22 mg of O ₂ After 6 Months 3.12 mg of O ₂ After 12 Months 1.74 mg of O ₂ per Year, After 1 st Yr
Bio-based Rating	★★
Carbon Footprint	4 gr CO _{2eq} per closure
Premium End Treatment	Embossed
Customized Printing	Yes
Diameters	22.5 mm 23 mm 23.5 mm
Lengths	37 mm 43 mm



SMART GREEN

GREEN LINE SOLUTION FOR BASIC AND POPULAR PREMIUM WINES

Smart Green is the next generation of the trusted Nomacorc Smart+ closure used by bottlers and retailers to protect millions of wines. Using PlantCorc™ technology based on renewable plant-based polymers derived from sugarcane, Smart Green is more sustainable and delivers an enhanced overall look and feel.

- Lower oxygen ingress rates
- TCA-free—no cork taint
- Premium embossed end treatment
- Soft-feel is easier to grip and has a more appealing, softer tactile touch
- Made from renewable, plant-based polymers
- Created using 100% renewable energy and recycled cooling water
- Minimizes environmental impact by preventing spoilage and waste from wine fault
- 100% recyclable



	<i>Smart Green</i>
Wine Preservation	Up to 3 years
Oxygen Ingress per Bottle	2.02 mg of O ₂ After 3 Months 2.72 mg of O ₂ After 6 Months 4.11 mg of O ₂ After 12 Months 2.73 mg of O ₂ per Year, After 1 st Yr
Bio-based Rating	★
Carbon Footprint	7 gr CO _{2eq} per closure
Premium End Treatment	Embossed
Customized Printing	Yes
Diameters	22.5 mm 23 mm 23.5 mm
Lengths	36 mm 42 mm



ZEST PREMIUM

GREEN LINE SOLUTION FOR PREMIUM SPARKLING WINES

Zest Premium, using Nomaticorc's proprietary PlantCorc™ technology, is the first certified zero carbon footprint sparkling wine closure. Zest Premium protects the flavor, color and aroma of delicate sparkling wines.

- Single piece design, avoiding risks of negative customer experiences due to crumbling or disk separation
- Ideal for optimal enological performance
- TCA-free—no cork taint
- Free from glue
- Premium end treatment
- Soft-feel is easier to grip and has a more appealing, softer tactile touch
- World's first zero carbon footprint sparkling wine closure
- Made from renewable, plant-based polymers
- 100% recyclable



	<i>Zest Premium</i>
Wine Preservation	Up to 2 years
Bio-based Rating	★★★
Carbon Footprint	0 gr CO _{2eq} per closure
Premium End Treatment	Yes
End Printing	Yes
Customized Printing	Yes
Diameter	30 mm
Length	46 mm



TESTIMONIALS

//

Nomacorc closures were an obvious choice for our Sauvignon Blanc because they maintain a tight seal even when the bottles are cooled, eliminating concerns of closure push-in or pull-out.

***Crocker and Starr
Pam Starr***

"Nomacorc closures look very much like natural cork. I've found that most consumers do not even notice the difference."

//

For the Vino Libero project, the main focus is to bring sustainability in the vineyards and in the cellar. So for our closure, we use Nomacorc Select Green.

***Vino Libero
Chiara Destefanis***

"The Nomacorc Green Line meets the Vino Libero philosophy. It also helps us solve some technical problems.

Using more sustainable packaging has been a plus that helped us reach a new part of the market: those that care about the environment."

//

Nomacorc is a partner for Pierre Chavin, more than a supplier. The Select Green closures help us to stay a leader in wine innovation.

***Domaines Pierre Chavin
Fabien Gross***

"The Nomacorc Green Line products also have a superior aesthetic and from an enological point of view, this is a really good solution for wine preservation."



DIMENSIONS AND CHARACTERISTICS

	Wine Preservation	Oxygen Ingress per Bottle	Bio-based Rating	Carbon Footprint	Premium End Treatment	Customized Printing	Diameters	Lengths
<i>Reserva</i>	Up to 25 years	0.29 mg of O ₂ After 3 Months 0.44 mg of O ₂ After 6 Months 0.73 mg of O ₂ After 12 Months 0.60 mg of O ₂ per Year, After 1 st Yr	★ ★ ★	-1 gr CO _{2eq} per closure	Yes	Yes	23.5 mm	44 mm 47 mm 52 mm
<i>Select Green 100</i>	Up to 15 years	0.40 mg of O ₂ After 3 Months 0.66 mg of O ₂ After 6 Months 1.22 mg of O ₂ After 12 Months 1.11 mg of O ₂ per Year, After 1 st Yr	★ ★ ★	-1 gr CO _{2eq} per closure	Yes	Yes	23 mm 24 mm	38 mm 44 mm 47 mm
<i>Select Green 300</i>	Up to 10 years	1.51 mg of O ₂ After 3 Months 1.99 mg of O ₂ After 6 Months 2.62 mg of O ₂ After 12 Months 1.11 mg of O ₂ per Year, After 1 st Yr	★ ★ ★	-1 gr CO _{2eq} per closure	Yes	Yes	23 mm 24 mm	38 mm 44 mm 47 mm
<i>Select Green 500</i>	Up to 8 years	1.71 mg of O ₂ After 3 Months 2.25 mg of O ₂ After 6 Months 3.13 mg of O ₂ After 12 Months 1.72 mg of O ₂ per Year, After 1 st Yr	★ ★ ★	-1 gr CO _{2eq} per closure	Yes	Yes	22.5 mm 23.5 mm	38 mm 44 mm 47 mm
<i>Classic Green</i>	Up to 5 years	1.70 mg of O ₂ After 3 Months 2.22 mg of O ₂ After 6 Months 3.12 mg of O ₂ After 12 Months 1.74 mg of O ₂ per Year, After 1 st Yr	★ ★	4 gr CO _{2eq} per closure	Yes	Yes	22.5 mm 23 mm 23.5 mm	37 mm 43 mm
<i>Smart Green</i>	Up to 3 years	2.02 mg of O ₂ After 3 Months 2.72 mg of O ₂ After 6 Months 4.11 mg of O ₂ After 12 Months 2.73 mg of O ₂ per Year, After 1 st Yr	★	7 gr CO _{2eq} per closure	Yes	Yes	22.5 mm 23 mm 23.5 mm	36 mm 42 mm
<i>Zest Premium</i>	Up to 2 years		★ ★ ★	0 gr CO _{2eq} per closure	Yes	Yes	30 mm	46 mm

GLOBAL FACILITIES AND REGIONAL SALES OFFICES

NORTH AMERICA

Nomacorc LLC
400 Vintage Park Drive
Zebulon, NC 27597, USA
+1-919-460-2200
info@nomacorc.com

EUROPE

Nomacorc SPRL
z.i. les Plénesses
Chemin de Xhénorie 7
B-4890 Thimister-Clermont, Belgium
+32 87 63 88 20
info@nomacorc.be

SOUTH AMERICA

Nomacorc SrL
Plant Industrial and Commercial
Sector: Gral. Mosconi 2986,
Rawson, San Juan, CP 5425, Argentina
+54 261 423 2861
ventas@nomacorc.com.ar

GERMANY

Rudolf Ohlinger GmbH & Co. KG
Industriestr. 5-7
D-67136 Fussgoenheim/Germany
+49 6237 40000
info@ohlinger.de

FRANCE | SPAIN

74 avenue Paul Sabatier
11100 Narbonne, France
+33 (0) 4 68 45 48 44
info@nomacorc.be

ITALY

Via L. Dalla Via 3B,
Centro Direzionale Summano, torre A, p. 5°
36015 Schio (VI), Italy
+39 0445 1656521 - 1656134 - 1748511
info@nomacorc.be

ASIA

17 Wuhan Road, Yantai
Development Zone
Shandong 264006, China
+86 535 216 9866
info@nomacorc.com.cn

SOUTH AFRICA

Juvenal South Africa (Pty) Ltd.
Meent Street, Wellington 7655
+27 21 873 0090
johan.conradie@juvenalcork.co.za



NOMACORC®